

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following document/is/:

D1: EP-A-1 120 761 (KOMMCONSULT DATENVERARBEITUNG) 1 August 2001
(2001-08-01)

D2: EP-A-0 848 360 (BRITISH TELECOMM) 17 June 1998 (1998-06-17)

Article 34(2)b PCT

1. Amended independent claim 1 is based on claims 1, 3 and 4 as originally filed and fulfills the requirements of Article 34(2)b PCT.
Dependent claims 2 to 13 correspond to dependent claims 2, 5 to 8 and 13 to 19 as originally filed.
2. Newly filed independent claim 14 is based on claim 4 as originally filed, the description, page 10, lines 18-25 and on Figures 1 and 2. Newly filed independent claim 15 is based on claim 4 as originally filed, the description, page 12, lines 8 to 12 and page 12, line 22 to page 13 line 4 and on Figures 1 and 2.

Hence, claims 14 and 15 fulfill the requirements of Article 34(2)b PCT.

Article 33(2)(3)(4) PCT

3. Document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document): a payment terminal device (paragraph 22, Zahlungsausführungsvorrichtung), for coupling a point of sale (paragraph 21, Registrierkasse), a mobile phone (paragraph 20), and a payment centre (paragraph 21, Abrechnungsstelle), wherein the payment terminal device comprises:
 - first interface means for releasably coupling the mobile phone to the payment terminal device (paragraph 22, Schnittstelle)
 - second interface means for coupling the payment centre to the payment terminal device (paragraph 21, Abrechnungsstelle), and

- data processing means coupled to both interface means (paragraph 8, Prozessoreinheit, Figure 1)
- wherein the first interface means comprise coupling (paragraph 22, Sende-/Empfangseinrichtung) means to transfer data between the mobile phone and the processing means via the first interface;
- wherein the first interface means comprise a modem (paragraph 23)
- and wherein the second interface means comprise means (paragraph 24, Codier-/Decodiereinrichtung) for converting data transferred between the second interface means and the payment centre into data being processable by the data processing means and vice versa.

The subject-matter of claim 1 therefore differs from the known payment terminal device in D1 in that the data transferred between the processing means and the mobile phone via the modem are transferred between the modem and the mobile phone as sound or acoustic data.

Hence, the subject-matter of claim 1 is novel over D1 meets the requirements of Article 33 (1) (2) PCT in conjunction with Rule 64.1 PCT.

4. The transmission of sound or acoustic data between the modem and the mobile phone allows any user of a mobile phone to use the payment terminal device without the need for specific low range wireless communication technologies like Bluetooth or IR (infrared) ports.
5. A realistic technical problem to be solved by the skilled person consists in using a general purpose sender/receiver in a payment terminal device that does not require specific communication ports on the mobile phone.
6. D1 prompts the skilled person to using any other sender/receiver than infrared or Bluetooth sender/receiver, which is capable of locally transmitting data, but it only mentions examples of optical and RF technologies but does not mention sound or acoustic data. Thus the skilled person would replace the IR or Bluetooth port by a another wireless technology with improved security features but would not use sound or acoustic data.

The solution proposed in claim 1 of the present application is therefore considered as involving an inventive step (Article 33(3) PCT).

7. The same argumentation is valid for the subject-matter of independent claims 14 and 15 as the use of sound or acoustic data (cf. system claim 14) or the use of an acoustic coupler (cf. method claim 15) are neither known from the prior art nor obvious for the skilled person.

Thus, the subject-matter of claims 14 and 15 are also considered as involving an inventive step (Article 33(3) PCT).

8. All claims fulfill the requirements of (Article 33(4) PCT).

Article 6 PCT

9. The difference between "a point of sale device" (cf. claim 1) and "a vending machine" (cf. claim 12) is unclear (Article 6 PCT).

Furthermore, it is unclear how a point of sale device (e.g. a vending machine) (cf. claim 13) with an integrated payment terminal device according to one of the claims 1 to 11 can be coupled to the payment terminal device without having an interface which is only claimed in the subject-matter of claim 12 (Article 6 PCT).

The applicant is asked to clarify the above issues in the regional phase.